

09/22/03  
16623 U.S. PTO

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22240 U.S. PTO  
10/667956  
09/22/03

MAIL STOP: PATENT APPLICATION  
Commissioner for Patents  
P.O. BOX 1450  
ALEXANDRIA, VA 22313-1450

**Express Mail No.: EV 314103207 US**  
**Attorney Docket No.: 0492611-0513 (MIT8853)**  
**DATE FILED: SEPTEMBER 22, 2003**

## UTILITY PATENT APPLICATION TRANSMITTAL

(FOR NEW NONPROVISIONAL APPLICATIONS UNDER 37 C.F.R. § 1.53(B))

Dear Sir:

Please find enclosed a patent application and papers as follows for:

### Inventor(s):

Given Name (first and middle)	Family Name or Surname	Residence (City and State or Foreign Country)
Cohen	Richard J.	Chestnut Hill, MA
Mukkamala	Ramakrishna	Lansing, MI
Sherman	Derin A.	Cedar Rapids, IA

**Title of the Invention: METHODS AND APPARATUS FOR DETERMINING CARDIAC OUPUT**

### A) APPLICATION ELEMENTS:

1) \_\_\_\_\_ **Fee Transmittal Form** (original and duplicate submitted for fee processing)

2) \_\_\_\_\_ **Applicant Claims Small Entity Status** (see 37 CFR §1.27)

a) \_\_\_\_\_ Statement Verifying Small Entity Status

3) X **Specification**

TOTAL PAGES: 36

- Descriptive Title of the Invention
- Related Applications
- Background of the Invention
- Brief Description of the Drawings
- Description of Certain Preferred Embodiments of the Invention
- Claim(s) (10 pages)
- Abstract of the Invention (1 page)

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MIT 8853

4) ☒ **Drawing(s)** (35 U.S.C. § 113) TOTAL SHEETS: 10

a) ☐ Formal Drawings (if checked)

5) ☐ **Oath or Declaration** TOTAL PAGES:           

a) ☐ Newly Executed (copy)

b) ☐ Copy from a prior application (37 C.F.R. § 1.63(d))-for  
continuation/divisional application

c) ☐ Unexecuted

6) ☐ **Application Data Sheet.** See 37 CFR 1.76.

7) ☐ **CD-ROM or CD-R in duplicate, large table or Computer Program  
(Appendix)**

8) ☐ **Nucleotide and/or Amino Acid Sequence Submission** (if applicable, all are  
necessary)

a) ☐ Computer Readable Form (CRF)

b) ☐ Specification Sequence Listing on:

i) ☐ CD-ROM or CR-R; or

ii) ☐ Paper

c) ☐ Statements verifying identity of above copies

d) ☐ Amendment Introducing Sequence Listing

**B) ACCOMPANYING APPLICATION PARTS:**

9) ☐ **Assignment Papers**

10) ☐ **37 C.F.R. § 3.73(b) Statement**

11) ☐ **Power of Attorney**

12) ☐ **English Translation Document** (if applicable)

13) ☐ **Information Disclosure Statement (IDS)/PTO-1449**

14) ☐ **Copies of IDS Citations**

15) X **Return Receipt Postcard (MPEP 503)** (specifically itemized)

16)      **Certified Copy of Priority Document(s)** (if foreign priority is claimed)

17)      **OTHER:** (if applicable, specified below)

**C) FOR CONTINUING APPLICATIONS:**

     CONTINUATION

     DIVISIONAL

     CONTINUATION-IN-PART (CIP)

OF PRIOR APPLICATION NO:                     

FILED:                                     

EXAMINER:                                     

GROUP/ART UNIT:                                     

**FOR CONTINUATION OR DIVISIONAL APPLICATIONS ONLY:** THE ENTIRE DISCLOSURE OF THE PRIOR APPLICATION, FROM WHICH AN OATH OR DECLARATION IS SUPPLIED AS DETAILED ABOVE, IS CONSIDERED A PART OF THE DISCLOSURE OF THE ACCOMPANYING CONTINUATION OR DIVISIONAL APPLICATION AND IS HEREBY INCORPORATED BY REFERENCE.

**D.) PRIORITY CLAIM(S):**

This application claims the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America listed below:

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Application Number	Filing Date	Status
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PCT Applications designating the United States:

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Application Number	Filing Date	Status
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This application claims the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

Provisional Application(s):

60/446,385

February 10, 2003

Pending

Application Number	Filing Date	Status
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E) METHOD OF PAYMENT OF FILING FEES FOR THIS APPLICATION:

- ☒ Applicant claims small entity status 37 CFR §1.27
- ☒ A check is enclosed to partially cover the filing fees.
- ☒ The Commissioner is hereby authorized to charge additional filing fees or credit any overpayment to Deposit Account Number 03-1721.

Basic Filing Fee (**LARGE** Entity) \$750.00

Additional Fees:

Total Number of Claims in excess of 20:  $(80 - 20) = 60 \times \$18$  \$1,080.00

Number of Independent Claims in excess of 3:  $(9 - 3) = 6 \times 84$  \$504.00

Multiple Dependent Claims (\$140): \$\_\_\_\_\_

**Total Filing Fee: \$2,334.00**

F) CORRESPONDENCE ADDRESS:

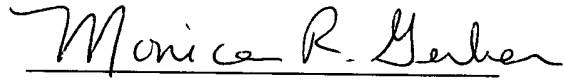


☒ Customer Bar Code Label: 24280  
PATENT TRADEMARK OFFICE

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Respectfully Submitted,

  
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**Date: September 22, 2003**